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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,197	05/11/2001	Richard A. Thompson	(P43) SYCS-005	7928
959	7590	01/12/2006	EXAMINER	
LAHIVE & COCKFIELD, LLP. 28 STATE STREET BOSTON, MA 02109			PIZARRO, RICARDO M	
			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/854,197	THOMPSON ET AL.	
	Examiner	Art Unit	
	Ricardo Pizarro	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-13 and 16-19 is/are allowed.
- 6) ☒ Claim(s) 14-15 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 14, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over
US patent No 5,550,805 (Takatori) in view of US 2005/025971 (Battou)

Regarding claim 14, Takatori discloses a failure restoration method in a mesh network comprising : providing software containing algorithms, said routing algorithms (restoration algorithm/operation, col 4 lines 3 and 18-23) calculating routing paths for network traffic said network traffic originating at a source node (source node A in Fig. 4) and traveling to a destination node , (destination node I in Fig. 4), configuring a plurality of said nodes in said network through the use of said software so as to form a virtual ring (for instance Ring 1 in Fig. 4, including nodes A,B,E and D, col 4 line 7) composed of said nodes and trunks, said virtual ring containing a plurality of working trunks and a plurality of protection trunk (working and spare paths , col 4 line 16-17), said virtual ring containing an entry node for each circuit (each node of a logical ring holds information of an entry node number and an exit node number of all traffic in the logical ring , col 12 lines 15-23) , said entry node designating the node through which said network traffic passes from the nodes of the network which are not part of said virtual ring into said virtual ring (traffic passing from the nodes not included in the

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nodes forming Ring 1); and said virtual ring further containing an exit node for each circuit (each node of a logical ring holds information of an entry node number and an exit node number of all traffic in the logical ring, col 12 lines 15-23) said exit node designating node through which said network traffic passes from said virtual ring to other nodes in the rest of the network which are not part of the virtual ring (traffic passing from the nodes not included in the nodes forming Ring 1),

Takatori does not specifically disclose configuring said ring assigning a protection trunk to more than one calculated path through said ring.

However Battou discloses a self healing network comprising Path protection re-routes each individual circuit when a failure occurs. Protection paths may be dedicated (1,1), or shared –by more that one path -(1:N). (Par 0292)

Therefore it would have been obvious to one of ordinary skill in the art to provide the protection path as disclosed by Battou to the system disclosed by Takatori in order to obtain a restoration method in a mesh network wherein protection path can be shared for improving quick rerouting of traffic and providing for restoration when a failure occurs in a node or transmission line in a network.

The motivation to do so is to provide a more adequate use of protection paths in a mesh network by allowing different paths to access it in case of failure in the network

Regarding claim 15, Takatori includes a signaling and an optical component (col 4 lines 21-23, col 12 line 36).

3. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over US

patent No. 5,550,805 (Takatori) in view US 2005/025971 (Battou) and further in view of US patent No. 6,490,244 (Pegrum).

Takatori and Battou do not disclose a ring contained in an OSPF area, as in claim 20

However Pegrum discloses a virtual ring contained in an OSPF area (col 2 line 60, col 3 lines 10-13), as in claim 20

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the Takatori and Battou references by providing the OSPF protocol in order to determine in a self healing network the least cost reachability cost for a path upon a failure in the network.

The motivation to do so is to obtain a failure restoration method wherein a least costly path between two entities in the network can be determined.

Allowable Subject Matter

4. Claims 7-13 and 16-19 are allowed.

Response to Arguments

5. Applicant's arguments with respect to claims 14-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-8300

(for formal communications intended for entry, for informal or draft communications, please label "PROPOSED" or "DRAFT")

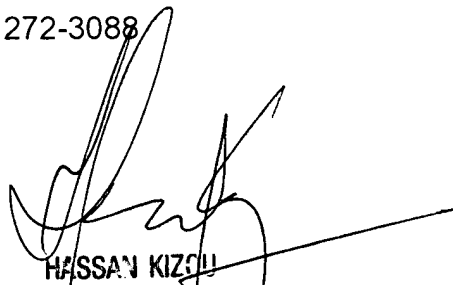
Hand-delivered responses should be brought to 220 South 20th Street, Crystal Plaza Two, Lobby, Room 1B03, Arlington, Va 22202 (Customer Window).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ricardo Pizarro** whose telephone number is (571) 272-3077. The examiner can normally be reached on Monday-Friday from 9:00 AM to 5:30 PM. .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Hassan Kizou** can be reached on (571) 272-3088

January 6, 2006

Ricardo Pizarro



HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2661